Content Analysis Report

Upper Mississippi River - Illinois Waterway System Navigation Study Workshops

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EXECUTIVE SUMMARY

Through a cooperative effort of the St. Louis, Rock Island, and St. Paul Districts, the U.S. Army Corps of Engineers (the Corps) held a series of seven public workshops related to the Upper Mississippi River - Illinois Waterway System Navigation Study (UMR-IWWS). The workshops, which started on July 26, 1999, and extended through August 5, 1999, were held in St. Louis, Missouri; Quincy and East Peoria, Illinois; Bettendorf and Des Moines, Iowa; La Crosse, Wisconsin; and St. Paul, Minnesota. The workshop locations were selected to provide the greatest accessibility to interested parties in the study area. Two independent public involvement consulting firms - Earth Tech, Inc. and Synergy Consultation Services - facilitated the workshops.

The purpose of this Content Analysis Report (CAR) is to document the workshop proceedings and public comments and analyze the communication that occurred at the workshops between the Corps and the public. Section 2.0 profiles the workshop agenda and process, and Section 3.0 presents the level of participation and public comment during and after the workshops. Section 4.0 distills the major questions and concerns voiced at each workshop and describes the dominant tones and themes. Various appendices contain complete documentation of the workshop proceedings, public comments, and listings of the major comment themes. This CAR presents an analysis of the comments, questions, and information submitted by the public through one or more of the following avenues:

- Statements or questions raised during the small group breakout sessions at each public workshop.
- Written statements submitted during the public workshops.
- Questions raised and formal statements made during large-group sessions that were documented by a court reporter at each public workshop.
- Letters submitted following the public workshops.
- Comment sheets submitted at each public workshop.

In the master listing, the comments and questions are organized into five basic categories: environmental, engineering, economics, operations, and project planning. These categories were further divided into subcategories as described in Section 4.0.

1.0 INTRODUCTION

1.1 WORKSHOP OVERVIEW

Through a cooperative effort of the St. Louis, Rock Island, and St. Paul Districts, the U.S. Army Corps of Engineers (the Corps) held a series of seven public workshops related to the Upper Mississippi River - Illinois Waterway System Navigation Study (UMR-IWWS). The workshops, which started on July 26, 1999, and extended through August 5, 1999, were held in St. Louis, Missouri; Quincy and East Peoria, Illinois; Bettendorf and Des Moines, Iowa; La Crosse, Wisconsin; and St. Paul, Minnesota. The workshop locations were selected to provide the greatest accessibility to interested parties in the study area. Two independent public involvement consulting firms - Earth Tech, Inc. and Synergy Consultation Services - facilitated the workshops.

The public was informed of the workshops through several different communication avenues. Media kits were distributed to broadcast and print media in the study area, and workshop announcements were highlighted in the study newsletter. In addition, the study's toll-free telephone number and web site both provided details of the workshops as well as other information about the study.

1.2 WORKSHOP OBJECTIVES

As part of its Navigation Study, the Corps had developed an initial list of alternative plans for reducing delays to commercial navigation. (The alternatives are listed in Appendix A, Navigation Study Presentation.) The objectives of the workshops were to:

- Present the alternative plans as well as the study findings that led to them.
- Summarize the economic and site-specific environmental impacts of each plan as well as information on the regional benefits of the various alternatives.
- Obtain public comments on and questions about the alternatives through facilitated small breakout sessions, an open question-and-answer period, recording of formal statements, and use of a workshop comment sheet.
- Give diverse interested parties an opportunity to express their views.
- Reach an understanding of public opinion regarding the alternative plans and issues.

1.3 PURPOSE AND STRUCTURE OF THIS REPORT

The purpose of this Content Analysis Report (CAR) is to document the workshop proceedings and public comments and analyze the communication that occurred at the workshops between the Corps and the public. Section 2.0 profiles the workshop agenda and process, and Section 3.0 presents the level of participation and public comment during and after the workshops. Section 4.0 distills the major questions and concerns voiced at each workshop and describes the dominant tones and themes. Various appendices contain complete documentation of the workshop proceedings, public comments, and listings of the major comment themes.

2.0 WORKSHOP PROFILES

The dates, times, and locations of the workshops are contained in Table 1. All of the meetings began at 6:00 p.m. and concluded before 11:00 p.m.

TABLE 1

MEETING DATES AND LOCATIONS

U.S. Army Corps of Engineers Navigation Study Workshops

DATE	LOCATION		
July 26, 1999	St. Louis, Missouri		
	Henry VIII Hotel and Conference Center		
July 27, 9999	Quincy, Illinois		
	Quincy University - North Campus		
July 28, 1999	East Peoria, Illinois		
	Illinois Central College		
July 29, 1999	Bettendorf, Iowa		
	Scott Community College		
August 3, 1999	Des Moines, Iowa		
	Des Moines Botanical Center		
August 4, 1999	La Crosse, Wisconsin		
	University of Wisconsin - La Crosse		
August 5, 1999	St. Paul, Minnesota		
	Inver Hills Community College		

Each of the workshops followed the same format, as follows:

(1) Opening remarks (15 minutes)

The lead facilitator, who was a neutral public involvement contractor, introduced himself to the full audience, reviewed the workshop format and process, described the desired purpose, and introduced the Corps' Project Manager.

(2) Formal presentation (45 minutes)

Corps Project Manager Gary Loss gave the formal presentation (the exception was in La Crosse, where David Tipple, the Assistant Project Manager, made the presentation). Before beginning the presentation, the Project Manager introduced all the Corps technical specialists in attendance. The presentation consisted of a description of the alternative plans, a summary of the study findings, a discussion of the environmental and economic impacts of each plan, and an outline of the next steps in the study process.

Appendix A contains the PowerPoint slide presentation given by the Corps.

(3) Description of small group sessions and availability of technical specialists (5 minutes)

Following the presentation, the lead facilitator briefly described the small group breakout sessions. Color-coded cards had been given to all members of the audience as they arrived and were used to randomly divide participants into small groups. Group size was targeted at between 12 and 20 participants. The small group facilitators were identified and the rooms for each session announced. In addition, the audience was informed that Corps technical specialists in the areas of economics, environment, engineering, and operations would be available in a central area to individually answer participant questions concurrent with the small group sessions. The small group facilitators were neutral public involvement contractors whose sole purpose was to record participant comments and questions; because of this, group members were encouraged to discuss their technical questions with the Corps technical specialists before they joined their small groups or to leave the small group at any time to ask their questions and then rejoin the group.

(4) Small group sessions (60 minutes)

The purpose of the small group sessions was to allow as many participants as possible to voice comments and ask questions. Approximately one hour was allotted for the breakout sessions. The following framing question was posted in each small group session room:

"Given what you know now about navigation problems and the possible measures identified by the Corps of Engineers, what do you want the Corps to know about how you, and the things you value, might be affected by either the possible measures or not taking any action?"

Once the small group participants had gathered, the facilitators followed the process outlined below:

- Introduced themselves and read the framing question.
- Reviewed the small group process, and emphasized that an open question-and-answer period and formal statement period would take place after the breakout sessions.
- Handed out 3x5 notecards and asked participants to take a few minutes to gather their thoughts in response to the framing question and the presentation and write comments and questions on the notecards. A secondary purpose of having participants fill out the cards was that, if the small group sessions ended before participants could voice all their comments, the information on the cards would be available for the record.
- Recorded comments and questions round-robin style, with each participant presenting one comment at a time and going around the group as many times as the allotted hour would permit. The facilitators used large flip charts and markers to record participant comments. Once each flip chart page was filled, the facilitator taped it to the wall, so all comments could be seen at all times. The comments and questions were paraphrased by the facilitators to save on both time and writing space, and participants were encouraged to notify the facilitator if the paraphrased version did not capture the intent of the participant's comment. Also, in order to maximize the time allotted, participants were asked to identify if another participant had already mentioned one of their comments or questions. If so, the facilitator placed a check mark by that comment as many times as participants identified their agreement with it. The purpose of the check marks was to determine if some comments or questions were more prevalent than others.
- Concluded the breakout sessions by thanking the group for their participation, and collecting the
 notecards. The facilitators also collected all the flip chart pages for posting in the central meeting
 area so that all participants could review the comments and questions raised in the other breakout

sessions. Facilitators had also been asked to jot down two or three of the most commonly asked questions for use during the subsequent question-and-answer period. These questions were given to the Corps Project Manager, who then distributed them to the various Corps technical specialists.

Appendix B provides a complete listing of the comments and questions recorded by the small group facilitators, broken down by comment category and alphabetized within each category by workshop location. Comments in italics are those that participants wrote on their notecards but did say aloud for the facilitator to record.

(5) Question-and-answer period (45 minutes)

The lead facilitator moderated the question-and-answer (Q&A) period and began by announcing that the Q&A period and the subsequent formal statements would be recorded by a court reporter. He also asked that audience members step up to the microphone(s) so the court reporter and other audience members could hear. The Q&A period started with the Project Manager asking Corps specialists in the four technical areas (economics, environment, engineering, and operations) to respond to two or three of the questions in their technical area that came out of the small group sessions. The workshop was then opened to questions from the floor.

A complete record of the Q&A periods at each meeting location is provided in the transcripts contained in Appendix C.

(6) Formal statements (no time limit)

The lead facilitator moderated the formal presentation of position papers and working papers. As with the Q&A period, a court reporter recorded the proceedings. In addition, those making statements were asked to leave any written statements with the Corps public involvement staff.

A complete record of the oral statements at each meeting location is provided in the transcripts contained in Appendix C. Appendix D contains the written statements the participants submitted at each workshop.

(7) Closing

The lead facilitator thanked the audience for coming, and encouraged them to fill out a comment sheet before they left.

Appendix E contains a summary of the comment sheet responses and additional comments from each meeting location.

3.0 PUBLIC PARTICIPATION

The effectiveness of the workshops can be assessed from many perspectives. The best approach to evaluating the quality of public involvement in these workshops is to combine a quantitative and qualitative assessment of each workshop. This section measures public participation quantitatively through indicators including attendance, participation, and responses to the workshop comment sheet. The qualitative analysis of the comments and questions received from the public are discussed in Section 4.0.

3.1 ATTENDANCE

The estimated attendance at the Navigation Study workshops is presented in Table 2. Since participants were not required to register, the figures presented are approximate headcounts. The total attendance at all seven workshops was approximately 700. The meeting with the largest attendance was Bettendorf, with an estimated 230 attendees. La Crosse was second with an estimated 162 attendees. The workshop drawing the fewest attendees was in Des Moines, with 44 attendees.

TABLE 2
WORKSHOP ATTENDANCE
U.S. Army Corps of Engineers
Navigation Study Workshops

Workshop Location	Estimated Attendance
St. Louis, Missouri	57
Quincy, Illinois	64
East Peoria, Illinois	68
Bettendorf, Iowa	230
Des Moines, Iowa	44
La Crosse, Wisconsin	162
St. Paul, Minnesota	78
TOTAL	703

3.2 PUBLIC PARTICIPATION

The level of public participation during and after the workshops is illustrated in Tables 3, 4, 5A, and 5B.

Table 3 presents the number of small group sessions at each workshop, and the number of people participating in each session. In all cases, the number of small group participants was smaller than the total attendance at each workshop. It is presumed that some participants left the workshop after the formal presentation, or spent their time talking with the Corps technical specialists.

TABLE 3

PARTICIPATION IN SMALL GROUP SESSIONS

U.S. Army Corps of Engineers Navigation Study Workshops

	# of		Total
Meeting Location	Groups	# of Participants in each Group	Participation
St. Louis, Missouri	4	14,13,14,11	52
Quincy, Illinois	4	16,15,15,13	59
East Peoria, Illinois	5	11,19,11,10,12	63
Bettendorf, Iowa	11	19,14,18,19, 23,13, 14, 22, 18, 13, 17	190
Des Moines, Iowa	3	15,12,15	42
La Crosse, Wisconsin	10	13,14,19,12,11,17,14,10,14,15	139
St. Paul, Minnesota	6	10,9,9,10,12,11	61
TOTALS	43		606

Table 4 shows the number of people who asked questions from the floor during the open Q&A period, the number of formal statements read, the number of written statements submitted at the workshops, and the number of letters received after the workshops. As mentioned earlier, the original transcripts of the Q&A and oral statement periods are contained in Appendix C and copies of the written statements in Appendix D. Letters received after the workshops are included in Appendix F.

(NOTE: A few of the written statements and letters in Appendix D and F contain statistical or technical data, the detail of which could not be adequately reflected in the comment summaries in Appendix B and G. To aid the Corps in locating and identifying this information, these materials are identified with an asterisk on the cover sheets of Appendix D and F.)

TABLE 4

NUMBER OF ORAL AND WRITTEN COMMENTS

U.S. Army Corps of Engineers Navigation Study Workshops

Meeting Location	# Asking Questions From the Floor During Open Q&A Period*	# Making Formal Oral Statements During Workshop	# of Written Statements Submitted at Workshop	# of Written Comments Submitted After Workshop				
St. Louis, Missouri	11	11	2	N/A				
Quincy, Illinois	5	6	3	N/A				
East Peoria, Illinois	3	17	1	N/A				
Bettendorf, Iowa	13	26	6	N/A				
Des Moines, Iowa	18	12	5	N/A				
La Crosse, Wisconsin	12	21	6	N/A				
St. Paul, Minnesota	2	12	5	N/A				
TOTALS	64	105	28	69				
* Some people asked multiple questions.								

Table 5A indicates the number of completed comment sheets that were handed in at each workshop. Table 5B presents the percentage responses to the two comment sheet statements:

The workshop provided an opportunity to gain information and a better understanding of the study's initial alternatives.

The workshop provided ample opportunity for everyone to offer comments about the initial alternatives.

Based on the results, the majority of respondents either strongly agreed or agreed with both statements. Percentages ranged from a high of 94% at Quincy and a low of 66% at La Crosse in agreement with the first statement, and from 96% at St. Paul down to 71% at La Crosse in agreement with the second statement. Responses that disagreed or strongly disagreed with the first statement ranged from 18% and 17% at Des Moines and La Crosse, respectively, down to 0% at Quincy, East Peoria, Bettendorf, and St. Paul. Responses disagreeing or strongly disagreeing with the second statement ranged from 6% in St. Louis down to 0% in both East Peoria and St. Paul.

The comment sheet also provided space for additional participant comments. A summary of the responses and comments from each meeting location is provided in Appendix E.

TABLE 5A

NUMBER OF COMPLETED COMMENT SHEETS U.S. Army Corps of Engineers Navigation Study Workshops

Workshop Location	# of Completed Comment Sheets
-	
St. Louis, Missouri	30
Quincy, Illinois	38
East Peoria, Illinois	25
Bettendorf, Iowa	64
Des Moines, Iowa	22
La Crosse, Wisconsin	53
St. Paul, Minnesota	25
TOTAL	257

TABLE 5B

COMMENT SHEET RESPONSES

U.S. Army Corps of Engineers Navigation Study Workshops (presented as percentages of those responding)

<u>Statement</u>: This workshop provided an opportunity to gain information and a better understanding of the study's initial alternatives.

Workshop Location	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Answer
St. Louis, Missouri	6.7%	83.3%	6.7%	0.0%	3.3%	0.0%
Quincy, Illinois	44.7%	50.0%	5.3%	0.0%	0.0%	0.0%
East Peoria, Illinois	16.0%	72.0%	8.0%	0.0%	0.0%	4.0%
Bettendorf, Iowa	37.5%	51.6%	6.2%	0.0%	0.0%	4.7%
Des Moines, Iowa	18.2%	54.5%	9.1%	13.6%	4.5%	0.0%
La Crosse, Wisconsin	15.1%	50.9%	15.1%	9.4%	3.8%	5.7%
St. Paul, Minnesota	16.0%	76.0%	4.0%	0.0%	0.0%	4.0%

<u>Statement</u>: This workshop provided ample opportunity for everyone to offer comments about the initial alternatives.

Workshop Location	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Answer
St. Louis, Missouri	16.7%	76.7%	0.0%	3.3%	3.3%	0.0%
Quincy, Illinois	57.9%	34.2%	2.6%	2.6%	2.6%	0.0%
East Peoria, Illinois	28.0%	64.0%	4.0%	0.0%	0.0%	4.0%
Bettendorf, Iowa	40.6%	43.8%	9.4%	3.1%	0.0%	3.1%
Des Moines, Iowa	22.7%	68.2%	0.0%	4.5%	0.0%	4.5%
La Crosse, Wisconsin	18.9%	52.8%	17.0%	7.5%	0.0%	3.8%
St. Paul, Minnesota	36.0%	60.0%	0.0%	0.0%	0.0%	4.0%

4.0 CONTENT ANALYSIS

4.1 INTRODUCTION

This section presents an analysis of the comments, questions, and information submitted by the public through one or more of the following avenues:

- Statements or questions raised during the small group breakout sessions at each public workshop.
- Written statements submitted during the public workshops.
- Questions raised and formal statements made during the large-group sessions that were documented by a court reporter at each public workshop.
- Letters submitted following the public workshop.
- Comment sheets submitted at each public workshop.

Because some members of the public provided the same statement by more than one method, a complete listing of all statements would have many redundant entries. To reduce the redundancy, a listing was prepared using the recorded statements from all the small group breakout sessions as the base comment set. This listing is presented in Appendix B. Then, comments and questions from the transcripts, the written statements, comment sheets, and letters were reviewed. Questions and comments from these sources (which are contained in Appendices C, D, E, and F) that were new or different were added to form a master listing. This listing is in Appendix G.

In the master listing, the comments and questions are organized into the following categories and subcategories:

1. Environmental

- Ecology and natural resources
- Recreation
- Erosion/siltation/sedimentation
- Comparison to other transport modes

2. Engineering

- Design
- Schedule
- Construction impacts on traffic
- Flood risks

3. Economics

- Cost assumptions
- Impact on economy
- Comparison to other transport modes
- Project funding

4. Operations

- Barge/lock scheduling
- Maintenance
- Safety

5. Project Planning

- Environmental studies not complete
- General study approach/assumptions

- General opinions
- Opinions concerning specific alternatives

6. Workshop Comments

Some of the comments and questions appear on the master list in more than one category because they address more than one issue. Some may also appear multiple times if they were raised at multiple workshop locations. If a comment was made more than once in a small group session, the number of times the comment was made is listed.

In this analysis discussion, the comments from all workshop locations are considered together first, and then variations among the locations are discussed.

4.2 ANALYSIS BY CATEGORY

4.2.1 Environmental

4.2.1.1 Ecology and Natural Resources

The majority of the comments related to ecology and natural resources expressed concern that there has already been substantial negative impact on river species and habitat and that the project will continue the general decline in the environmental health of the river ecosystem. Specific concerns cited included:

- Impact on wildlife habitat and food sources.
- Loss of specific plants and animals such as the canvasback duck and wild celery.
- Sedimentation in backwaters.
- Impact on water quality.
- Risk of chemical spills.
- Nutrient releases.
- Impacts to wetlands and bottomlands.

Frequently stated concerns were that the river is changing from a natural river ecosystem to a "canal," that habitat replacement projects and other mitigation do not adequately compensate for loss of original habitat, and that there is no monitoring of the effectiveness of mitigation.

Some commented that the environmental evaluation of the project is too narrow. The entire river system (watershed/floodplain) impacts should be evaluated and past impacts should be remediated.

A small number of comments indicated that, overall, the project would have a net benefit to natural resources because it will lead to a larger share of the grain market for United States farmers, resulting in decreased loss of critical habitat in South American countries. They also stated that the pools created by locks and dams have provided habitat.

One comment indicated that it is not correct to say that there are no environmental benefits with the no-action alternative because there are environmental benefits relative to the other alternatives.

4.2.1.2 Recreation

The majority of comments concerning recreation addressed the need to be sure that the project will not adversely affect the recreational user of the river. They stressed the economic importance of recreation to river towns and cities. There was concern that more barge traffic will cause conflicts with recreational

boaters. A common issue was that the study does not fully evaluate the benefits and adverse impacts of the project on recreation. More discussion of how recreation would be improved or degraded by the project is needed so the public can comment.

Some comments and questions were specific. For example:

- What is needed to maintain good recreation in Pool 15?
- Conflicts with barges would be avoided if pleasure craft locks were installed.
- St. Louis is identified as a dangerous area for boaters.
- More people use the river for recreation than use the major national parks.
- Increase in barge traffic will increase interaction of barges and recreational boats and lead to more accidents.
- How long will recreational boats have to wait at the locks?
- Can the 600-foot locks be retained for recreational boats when the 1200-foot locks are installed?

4.2.1.3 Erosion/Siltation/Sedimentation

Erosion/siltation/sedimentation was the most frequently expressed of specific environmental concerns. Most of the comments were not confined to the impacts of the specific project alternatives, but rather stated the need to address all causes of siltation and sedimentation impacts on the river. Erosion from farmland was repeatedly cited as a significant source of sediment to the river, and some suggested that funds be diverted from this project to aid farmers in establishing erosion control practices. Farm organization representatives stated that farmers have taken steps to reduce erosion. Some commenters stated that siltation/sedimentation was the most important environmental issue for the river and most of the money and focus should be directed to that issue.

One person commented that siltation not only impacts habitat but water supply sources as well, and provided the example of siltation in Lake Hamilton.

Some stated that increased barge traffic would increase the sedimentation problem and degrade water quality by sediment resuspension. Others said that they could not evaluate the impact on sedimentation and that the study should specifically address this.

Bank erosion due to increases in barge traffic was cited as a potential problem. A few commented that bank erosion is caused more by high-speed pleasure boats than by barges.

4.2.1.4 Comparison To Other Transport Modes

Starting from the assumption that grain and other commodities must be shipped by other transportation modes if barge traffic cannot be improved, some suggested that the environmental impacts of barge transport be compared with the impacts from rail and truck transport. In general, most of those commenting felt that truck and rail transport have a greater negative impact on the environment. They felt that this should be considered in deciding if the project will be implemented. Fuel economy and air pollution were often cited as areas where water transport is better. The better safety record of river transport was also mentioned.

Several attendees questioned the assumption that grain must be transported to world markets. They suggested that value-added processing of grain close to the point of production be considered.

4.2.2 Engineering

4.2.2.1 **Design**

There were many and far-ranging comments concerning the conceptual designs of the alternatives. Many of the comments were location-specific. These either provided opinions that alternatives as presented may not be implementable because of site constraints or requested that the design consider specific concerns. Examples of this comment type are:

- Construction of a new lock at Peoria may not be feasible due to the presence of a bridge.
- At Lock and Dam 21, consider extending the west gate, creating a double lock for pleasure and commercial traffic.
- What happens to Alternative H when you add mooring buoys to Locks 12, 18, 20, 22 and 24?
- Should consider all 1200-foot locks and 12-foot channel. Do it right. The system is 60 years old. Why build on this old base?

Some people questioned why operational improvements and use of scheduling tools were not considered for improving efficiency and reducing river traffic delays. They asked that non-construction alternatives such as use of air-traffic-control type scheduling be considered to make better use of existing facilities.

There was also some concern that the improvements in most alternatives require new equipment to be installed in a 60-year-old infrastructure. They question whether the old facilities that remain have a reasonable service life left.

A boat captain requested that the Corps actively seek opinions and suggestions from captains and pilots as they evaluate alternatives and formulate design concepts.

4.2.2.2 Schedule

Many of those who favored the project urged the government to proceed quickly with the project. The general theme was that the project has already taken far too long with too much planning and no implementation. They stated the need to get improvements in place soon to keep river-users competitive in the world market.

Others favored holding up the project until all the environmental data collection and evaluation were complete so that a thorough comparison of alternatives could be made.

4.2.2.3 Construction Impacts on Traffic

A small number of people requested more information on how river traffic would be disrupted during construction. They were concerned that a lengthy construction period with delays will have a negative impact on their business. They stressed the need to be informed and consulted as the project proceeds so they can adjust for construction delays.

4.2.2.4 Flooding

The impact of the project on flooding was a concern. Commenters stated that increased traffic would result in more erosion of levees. They asked that this be addressed in the study. Others asked that the study be expanded, if necessary, to evaluate options for additional high-water storage. There were also suggestions that material dredged from the channel be used to improve levees.

4.2.3 Economics

4.2.3.1 Cost Assumptions

There were a large number of comments and questions concerning the assumptions used to evaluate costs and cost/benefit ratios. Some of the comments were quite specific. For example:

- The impact of the change in Chicago Board of Trade delivery points should be assessed.
- The elasticity evaluation is flawed.
- The assumption about changes in rail rates is not reasonable.
- Is the impact of global competition on the amount of commodity transport in the future considered?
- Extrapolated environmental data from lower pools would underestimate site-specific environmental cost in upper pools.
- Production and export of agricultural commodities is underestimated.
- Annual net benefits for the Peoria and LaGrange locks are underestimated.
- Site-specific habitat costs are deceptive.
- The longest and most costly delays come during periods of peak use. Average daily delay per lock does not reflect this.
- There is a cost associated with the No-Action alternative. Old locks will require costly maintenance.

Other comments and questions were more global. For example:

- Is the future of the Panama Canal taken into consideration in planning?
- I question the Corps' data or model for potential growth in river commerce.
- Future hydraulic conditions may negate benefits of proposed improvements.
- Earlier studies showed that the project could not be justified on a cost/benefit basis. What has changed?
- Environmental impact costs are underestimated. The cost should include mitigation of past damage.
- How can the value of waterfowl migration be taken into account in assessing costs and benefits?
- Net benefits are underestimated because rail rates are too low and the projected production increases are too low.

A number of people stated that there was insufficient explanation of the basis for assumptions. They want more detailed explanation of assumptions.

Some people were confused about how this project would relate to the Environmental Management Program (EMP). Are the costs associated with environmental restoration in this project also included in the EMP? Some people stated that this project should be coordinated with the EMP.

4.2.3.2 Impact on Economy

There were numerous comments concerning the impact of the project on the economy. Most comments cited the positive impact of the project and the potential loss of market share to foreign companies if the project is not built. Competition from grain farmers in South American countries was frequently mentioned.

Some people said the positive impact on the economy is underestimated because it does not consider the true impact on the local and regional economy, especially the small towns and cities along the river.

A small number of people said that improving transportation is not a long-term economic solution because low-value grain is a reality with foreign competition that will not go away. They suggested that a change to value-added processing close to the point of production is a better economic solution.

4.2.3.3 Comparison to Other Transport Modes

Many comments compared the cost of waterway transport to other transportation modes. Most stated that waterway transport was less expensive and resulted in more profit for producers compared with truck or rail transport. Some stated that if waterway transport facilities are not upgraded, rates of competitive transport modes would increase. Waterway transport acts as a check on other rates.

Some comments cited a study by the Iowa Department of Transportation and the Iowa Corn Promotion Board that showed that rail is the most fuel-efficient way to ship grain to European and Japanese markets.

Other people were not sure which mode is the most cost-efficient and wanted that studied and reported.

4.2.3.4 Project Funding

A wide range of comments and questions were expressed about project funding. In general, the source of funding for the project was not clear to many people. Some thought that all the funding was provided by the general taxpayer and believed that the barge companies should not be subsidized at the expense of the taxpayer. Others stated that a significant portion of the funding comes from a trust fund from a fuel tax on barges.

Some pointed out that all forms of transport are subsidized to some degree. There were opinions that subsidies should go to the most cost-efficient transport mode.

Another group of comments centered around the opinion that the funds are not distributed equally among river projects and that the Illinois and Mississippi River projects have to receive their share of project money.

There was also confusion among the public concerning sources of funding for this project and for general maintenance.

4.2.4 Operations

4.2.4.1 Barge/Lock Scheduling

A small number of people stated that perhaps better traffic scheduling could relieve much of the river congestion. Some stated that a scheduling system similar to that used by air traffic controllers, in which departure times and routes are assigned, would make the present infrastructure more efficient and eliminate the need for construction improvements. Other suggestions included:

- More uniform locking rates.
- Channel markers.
- More stringent licensing and enforcement.
- Re-engineered barge and tow designs.
- Faster drag lines.
- Helper boats.
- Better lock technology.
- Improved electrical systems.

One commenter asked if the Corps will be more flexible in setting the shipping season if the project is built.

Another individual requested more information concerning where delays are actually caused. Are the locks really the problem or is it the loading and unloading process that causes delays?

Some comments addressed current operation and operation oversight. Barges are parked along the riverbank for extended periods of time and nobody checks on this.

Some comments indicated that dredged sediment should be used to improve levees, beaches and islands.

4.2.4.2 Maintenance

Several comments indicated that the maintenance budget is not adequate to maintain the old system. There is insufficient work done to adequately maintain facilities that are already there.

One commenter was concerned that the project will just result in moving the bottleneck to another part of the river.

There was also concern that the environmental impacts of long-term maintenance should be addressed.

4.2.4.3 Safety

There were relatively few comments concerning the safety of river transportation resulting from the project. Generally, the comments indicated that the project would result in a safer river because there would be less handling of barges with 1200-foot locks. Some requested that the study evaluate the impact on safety of the different alternatives.

4.2.5 Project Planning and Approach

4.2.5.1 Environmental Studies Not Complete

The fact that the environmental studies were not all complete prior to the workshops was a concern to many. Several people stated that they could not comment on the cost/benefit analysis because they did not have all the information required to evaluate the study conclusions. Some said that nothing should be decided until the environmental studies are complete and there is an opportunity to evaluate them.

4.2.5.2 General Study Approach/Assumptions

There were many comments concerning the general approach to the study and the general assumptions used in the study. Many of the comments were in the following areas:

- Environmental impact evaluation should not be limited to the proposed construction sites and their
 limited area. There have been significant impacts from past projects and river use that should be
 addressed. Some of the issues that are addressed, for example sedimentation, have causes outside the
 study area and cannot be properly evaluated with a narrow study. Impacts of the project further
 downriver outside the study area should be considered because impacts do not stop at an arbitrary
 study boundary.
- Limiting the evaluation of benefits to "benefits to the nation" is not appropriate. Communities in the project region, especially river cities and towns, are directly affected, whereas communities far away are not affected at all. Region-specific benefits and impacts should be studied and reported.
- Specific beneficiaries of the project should be identified and the benefits to them quantified. Several attendees felt that there is little real benefit to farmers and most benefit is going to the barge companies and large grain-handling companies. Some felt that the character of small river towns will be negatively affected and this should be included in impacts. Others felt that small river towns need the project to survive and this should be included in the study.
- The study should not be limited to construction alternatives. There may be innovative methods, such as advanced scheduling techniques and barge handling methodologies, that would provide the same benefits at a much lower cost.
- Unanticipated consequences should be considered. For example, will longer locks encourage longer tows? Will barge companies increase tows beyond 1200 feet and still need to break to get through locks?
- A layman's definition of technical terms is needed. For example, what is "demand elasticity"?
- How are decisions made? For example, what level of benefit justifies a project? How does the Corps balance issues of environment and economy?

- Was there a sensitivity analysis done on the assumptions of the cost/benefit analysis?
- The study did not have a clear mission.
- Consider consolidating locks and dams, removing some dams and creating fewer pools.

4.2.5.3 General Opinions

This section of the master listing includes opinions about the project as a whole. Most of the comments in this section are restatements or amplification of comments or questions in other sections. Most of the opinions were either in favor of the project or in favor of the project with some reservations. The most frequently expressed reason for favoring the project was related to the economic impacts on farmers and the need to stay competitive in the global market.

Those in favor with reservations often stated that the project should be built, but the environment should also be protected and adequate money should be spent to assure that it is.

There were opinions that taxpayers will pay and big business will benefit, and there were opinions that subsidies are an economic fact of life and everybody will benefit.

There were general statements that any construction will further adversely impact a river system that is already impacted environmentally and no further construction should be done until past environmental damage is corrected. A small number of people said the project should not be constructed at all.

4.2.5.4 Opinions on Specific Alternatives

Of those who commented on specific alternatives, most recommended Alternative H. A few of people who had alternative-specific comments chose the No Action alternative or Alternative B.

4.2.6 Comments on Workshops

Approximately 20 comments were received concerning the workshops themselves. Most of these comments were from the comment sheets handed out and collected at the workshops. Most of the comments listed shortcomings of the process. Cited shortcomings included:

- Only partial answers were given to questions.
- The depth of information provided was not adequate.
- The schedule and format were "rigged" to get response favorable to Corps.

A few of the comments stated that the small group sessions were good, because they allowed everyone to express an opinion or ask a question.

4.3 DIFFERENCES AMONG WORKSHOPS

In general, the same themes were expressed at all the workshops. The only significant differences were in the mix of opinions concerning business, ecology and natural resources, and recreation interests. In St. Louis, business interests were strongly expressed with environmental and recreation interests less expressed. The Bettendorf, La Crosse and St. Paul workshops had greater expression of environmental and recreational interest, along with substantial business interest.

In the master comment listing (Appendix G), the comments are grouped by category and within each category they are grouped by the location where the comment was received. This listing can therefore be used to get a sense of the emphasis of the comments at each workshop.